

Paul Button

SUMMARY OF QUALIFICATIONS

Petroleum Engineer with diversified experience in Reservoir and Production Engineering. Responsibilities include reservoir modeling, rate transient analysis, property valuation, well completion optimization, detailed reservoir characterization, waterflood management, and EOR management.

EMPLOYMENT HISTORY

Poplar Resources

2019-2020

Sr Vice President Resource Development

Billings, MT

Supervise technical and operational staff on the implementation and mitoring of Gas oil gravity drainage project at Poplar Dome.

Button Petroleum Management

2016-2020

Consulting Reservoir Engineer

Billings, MT

Consulting Reservoir Engineer that has performed field valuations and recovery forecasts on conventional and un-conventional fields at client's request.

- Constructed development plan for multiple water flood fields including economic model. Work with geology and land to determine unitization area and criteria.
- Conducted optimal spacing study for unconventional Bakken & Three Forks development. Reviewed multiple spacing tests and well performance to determine most economic development scenario for each reservoir in the client's subject land position.
- EOR review and valuation of field for acquisition. Included full reserve review and CO2 requirement review.
- Reservoir Simulation and EOR recovery project design and planning.

SM Energy

2005 - 2016

Senior Reservoir Engineer

Billings, MT

Multi-disciplined team leader for Wyoming asset team, developing conventional, unconventional, and EOR reserves. Responsibilities include development planning, exploration evaluation, EOR project screening, and A&D evaluation.

- Multi discipline team lead responsible for the acquisition of 160,000 acres of stacked pay un-conventional resources in the Powder River Basin. Primary reservoir evaluator for over \$300 MM in acquisitions and over \$200 MM in appraisal drilling in the Frontier and Niobrara. Responsible for identifying key play drivers, developing optimal depletion plan, and maximizing net asset value. Key evaluation engineer on basin wide exploration effort focus on Muddy and Mowry.
- Lead reservoir engineer on team that developed the Niobrara and Codell resource plays in Laramie Co, Wyoming. Worked intricately with asset team to design innovative completion design to maximize recovery from Niobrara. Team drilled first long lateral (+9,000' lateral) which was key to economic exploitation of the Codell and Niobrara.
- Lead role in EOR evaluation of Wind River and Bighorn Basin Tensleep fields. Developed screening criteria and determined recovery potential on several legacy assets. Determined technical feasibility of miscible CO2 but determined resource size was economically unfeasible.

- Primary reservoir engineer Nance Petroleum's early development of Elm Coulee Field Richland Co, MT. Instrumental in asset team's effort to improve recovery through spacing optimization, wellbore design and completion design.

Kinder Morgan

2003 - 2005

Reservoir Engineer

Midland, TX

Multi-disciplined team member in Yates field, a highly fractured carbonate reservoir with 400 million barrels reaming reserves. Responsibilities include improving reservoir understanding, optimizing contact movement to improve reserve development, and providing analysis on EOR projects.

- Selected 40 horizontal well locations for drilling in early 2004. Prepared economic justification for each well, selected target interval within reservoir, developed detailed well plan, and provided production and reserve forecast for the program.
- Prepared detailed review of Surfactant and Thermal EOR projects that included review of production response, economic performance, and Texas EOR Severance Tax fillings.

MARATHON OIL COMPANY

1998 - 2003

Reservoir Engineer

Midland, TX

Multi-disciplined team member in Yates field, a highly fractured carbonate reservoir with 400 million barrels reaming reserves. Responsibilities include improving reservoir understanding, optimizing contact movement to improve reserve development from double displacement gas injection, and providing analysis on EOR projects.

- Improve reservoir understanding for diversified team by proving simulation support that led to the optimization of the Double Displacement Process. Built and ran a variety of simulation models that led to increased understanding of oil drainage and mobilization. Recommendations resulted in improved oil rate and increased asset value.
- Recommended termination of 60 MMCFD of nitrogen injection to control reservoir pressure growth and moderate contact movement to maximize oil mobilization. Project included simulation, material balance, and economic analysis as well as contract negotiation. Resulted in a \$25 million improvement in asset net present value.
- Performed reserve evaluation of an immiscible CO₂ project. Determined that a potential 25 million barrels of reserves are probable. Analysis involved compositional modeling, equation of state tuning, coordinating PVT lab work, and economic analysis.
- Coordinated \$80 million dollar capital and expense budget for three years. Responsible for presenting to senior management, tracking expenditures, and making recommendations on projects for local management's approval.
- Project engineer responsible for testing and developing innovative, low cost completion methods in Yates field. Successfully modeled completion performance of both vertical and horizontal completions and recommended changes in our completion practices that improved the well production efficiency. Published an SPE paper on the modeling work and presented it at a convention in Villahermosa, Mexico.

EDUCATION

Bachelor of Science in Petroleum Engineering (B.S.P.E.) December 1997

Montana Tech of the University of Montana, Butte, Montana

SPECIAL SKILLS

Reservoir Simulation... Rate Transient Analysis... Aries... PHDWin...Spotfire... Excel... Word... Power Point...